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10/775,797	02/10/2004	Ramarathnam Venkatesan	MS307073.01/MSFTP588US	9675

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EXAMINER
TRAORE, FATOUMATA

ART UNIT	PAPER NUMBER
2436	

NOTIFICATION DATE	DELIVERY MODE
12/12/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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	Application No.	Applicant(s)
Office Action Summary	10/775,797	VENKATESAN ET AL.
	Examiner	Art Unit	
	FATOUMATA TRAORE	2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>23 September 2008</u>.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1,2,4,6-10,14-18 and 20-35</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1,2,4,6-10,14-18 and 20-3</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
         application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This is in response to the amendment filed September 23, 2008. Claims 1, 14,

20, 28 and 33-34 have been amended. Claims 3, 5, 11-13 and 19 have been cancelled.

Claims 1, 2, 4, 6-10, 14-18 and 20-35 are pending and have been considered below.

Claim Objections

2.   Claims 34 and 35 objected to because of the following informalities: Claim 34

and 35 are not properly indented. Claim 15 depends of a cancelled claim 11. For

examination purpose, only claim 15 will be treated as depending of claim 1. Appropriate

correction is required.

3.   Claims 17 and 31 are objected to under 37 CFR 1.75(c), as being of improper

dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s)

in proper dependent form, or rewrite the claim(s) in independent form. Applicant has

amended independent claims 1 and 28 to include the limitations of claims 17 and 32 . .

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

5.   Claims 1, 20, 28, and 33-35 recite the limitation "the sequence of one of the messages" in the last paragraph of the claims. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

6.   The 101 rejection to claims 20-27 and 33-35 have been withdrawn in light of the amendment to the claims.

Response to Arguments

7.   Applicant has substantially amended the claims. In particular, Applicant has amended the independent claims to recite "*a pseudo random number generator that generates two pseudo random numbers based upon a position within the sequence of one of the messages, and further generates a random permutation." In particular Applicant argued that Moskowitz is silent with regard to a system that facilitates efficient code construction, comprising: ....a pseudo random number generator, the pseudo random number generator generates two pseudo random numbers a and b, each n number of bits, based upon a position within the sequence of one of the messages, and further generates a random permutation c the messages, and further generates a random permutation. cr that permutes the n bits or that permutes the n bits."* However, it should be pointed that Venkatesan was used to reject the above claim limitation see non-final rejection mailed 07/30/2008 section 10.

8.   Applicant also argued" *Moskowitz and Venkatsesan et al., individually or in combination, do not teach or suggest each and every element set forth in the subject claims. In particular, Venkatsesan et al. does not make up for aforementioned*

deficiencies of Moskowitz with respect to independent claims 1 and 28 (which claims

13-14, 17-18 and 32 depend respectively there from)". The examiner respectfully

disagrees with applicant characterization the reference and submits that <u>Venkatsesan et</u>

<u>al</u> discloses a pseudo random number generator(, the pseudo random number

generator generates two pseudo random numbers a and b (Generator 320 randomly

selects pairs of nodes on both of the flow graphs, inserts an edge) (see column 7, lines

25-43; column 7, lines 52 to column 68 line 15; Fig. 9A and Fig. 10), each n number of

bits (*the nodes are canonically labeled using some scheme (e.g., by integers, short*

binary strings or elements from a finite field). From the distinguished node, one may

traverse the graph using any one of many conventional traversal schemes which visit all

the nodes in a predetermined sequence) (column 7, lines 50-60), based upon a position

within the sequence of one of the messages, and further generates a random

permutation cr that permutes the n bits or that permutes the n bits(*An illustrative*

implementation could be that, e.g., routine r.sub.i+1 is called by some code to alter data

or variables (or code) in some segment and later after some execution routine r.sub.i+2

is called to reverse this change)(column 7, lines 2-65).

9.   There is no new ground of rejection when the basic thrust of the rejection

remains the same. See In re Kronig, 539 F.2d 1300, 1302-03, 190 USPQ 425, 426-27

(CCPA 1976) To the extent that the response to the applicant's arguments may have

mentioned new portions of the prior art references, which were not used in the prior

office action, this does not constitute new a new ground of rejection. It is clear that the

prior art reference is of record and has been considered entirely by applicant. See In re

Boyer, 363 F.2d 455,458 n.2,150 USPQ 441,444, n.2 (CCPA 1966) and In re Bush, 296

F.2d 491,496, 131 USPQ 263,267 (CCPA 1961). The mere fact that additional portions

of the same reference may have been mentioned or relied upon does not constitute new

ground of rejection. In re Meinhardt, 392, F.2d 273,280, 157 USPQ 270, 275 (CCPA

1968). Accordingly, this office action is being made final.

10.   Therefore, the examiner submits that the combined teaching of Moskowitz and

Venkatsesan et al discloses each and every feature of the above claims and

respectfully maintains the rejection.

Claim Rejections - 35 USC § 103

11.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

12.   Claims 1, 2, 4, 6, 14-18, 20, 28 and 30-35 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Moskowitz (US 2008/0046742) in view of Venkatsesan et al

(US 6,829,710).

Claims 1, 20, 28 and 33-35: Moskowitz discloses a system that facilitates

efficient code construction, comprising:

i.   A processor for executing the following components (*processor for

identifying an area of the digital signal) (paragraphs [0011], [0034]):*

ii.   A component that receives a first code(a receiver to receiver digital

signal) (*paragraph [0034]*) designed in a noise model, the first code

comprises algorithms utilized to correct noise errors with high probability,

the first code is intended to refer to encoded data as well as error

detection codes and includes a linear code(*paragraphs [0021]-[0022],*

[0050]), wherein the first code is generated based at least in part on a

sequence of messages (*random bit errors are error bits occurring in a*

random manner, whereas burst errors may exist over large sequences of

the binary data comprising a digitized signal) (paragraph [0085]);; and

iii.   A transformation component that transforms the first code to a new

code that has essentially same length parameters as the first code but is

hidden to a computationally bounded adversary, the transformation

component utilizes a random number generator to perform algebraic

transformations on data utilizing the first code to generate the new code,

and the transformation component hides the first code via randomizing

data that employs the first code thereby not enabling the computationally

bounded adversary to determine a location of critical bits to attack

(*paragraphs [0011], [0047]*),

iv.   wherein the new code acts as a protective wrapping of the first

code, such that an attack on the new code by the computationally

bounded adversary would appear as a noise attack on the first code (*It*

also helps that the error is random, and so over time, appears as white

noise, which is relatively unobtrusive)(paragraph [0050]), as the attack would be randomly distributed across the first code and not concentrated on a particular location within the first code, this allows the first code to act as it was designed to and utilize(paragraphs [0047], [0050]) .;

v.　　　wherein the first code designed in the noise model utilizes the algorithms to correct the noise errors with a high success rate (paragraph [1016]);

vi.　　　A decoder that determines the first code from the new code, the decoder accesses algorithms utilized by the transformation component to decode the new code and determine the first cod (paragraphs [0024], [0026]), where the decoder knowing the sequence of messages (paragraph [0024]); and

vii.　　　A tracing component that determines whether a user accessing the first code is a valid user via a unique watermark associated with a particular user and embedded in the first code wherein if the watermark does not correlate to an authorized user, access is denied (paragraphs [0030], [0031], 0034], [0037]).

does not explicitly discloses that the pseudo random number generator generates two pseudo random numbers a and b, each n number of bits, based upon a position within the sequence of one of the messages, and further generates a random permutation o- that permutes the n bits. However,

Venkatesan et al discloses a technique for producing, through watermarking,

which further discloses that the pseudo random number generator generates two pseudo random numbers a and b, each n number of bits, based upon a position within the sequence of one of the messages, and generating a random permutation σ that permutes the n bits(*Fig. 9A, item 936*).Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of <u>Moskowitz</u> such to generate two random numbers based on desistance One would have been motivated to do so in order to securely watermark any executable (column 4, lines 4-49).

Claim 2: <u>Moskowitz</u> and <u>Venkatsesan et al</u> disclose a system that facilitates efficient code construction as in claim 1 above, and <u>Moskowitz</u> further discloses that the new code appears random to the computationally bounded adversary *(It also helps that the error is random, and so over time, appears as white noise, which is relatively unobtrusive) (paragraph [0080], [0094])*.

Claim 4: <u>Moskowitz</u> and <u>Venkatsesan et al</u> disclose a system that facilitates efficient code construction as in claim 1 above, and <u>Moskowitz</u> further discloses that the transformation component comprises a pseudo-random number generator that facilitates transforming the first code into the new code (*creation of a pseudorandom key*)(*paragraph [0109]*).

Claim 6: <u>Moskowitz</u> and <u>Venkatsesan et al</u> disclose a system that facilitates efficient code construction as in claim 1 above, and <u>Moskowitz</u> further discloses that the decoder comprising a checking component that determines whether the first code has been corrupted (*paragraph [0048]*).

Claim 14: Moskowitz and Venkatesan disclose a system that facilitates efficient code construction as in claim 1 above, and Venkatesan et al further discloses the transformation component sends a randomized code word to the decoder, the randomized code word having the form a x ~(f(mi))+ b, where f is an encoding function, m is a message, i is the position of the message within the sequence, and x is a bitwise multiplication operator(column 8, lines 34-43). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify teaching of Moskowitz such to generate two random numbers. One would have been motivated to do so in order to securely watermark any executable (column 4, lines 4-49).

Claims 15 and 30: Moskowitz and Venkatsesan et al disclose a system and method that facilitates efficient code construction as in claims 1 and 28 above, and Moskowitz further discloses that the transformation component embeds information relating to the sequence of messages into the new code (*paragraphs [0061], [0067]*).

Claim 16: Moskowitz and Venkatsesan et al disclose a system that facilitates efficient code construction as in claim 15 above, and Moskowitz further discloses the first code has a length of nl, and the information relating to the sequence of messages embedded in nl locations in the new code (*paragraphs [0061], [0067]*).

Claims 17 and 32: Moskowitz and Venkatsesan et al disclose a system and method that facilitates efficient code construction as in claims 16 and 31 above, and Moskwitz further discloses a pseudo random number generator(*paragraph*

[0109]), but does not explicitly discloses that the pseudo random number

generator generates two pseudo random numbers a and b, each n number of

bits, based upon a position within the sequence of one of the messages, and

further generates a random permutation o- that permutes the n bits. However,

Venkatesan et al discloses a technique for producing, through watermarking,

which further discloses that the pseudo random number generator generates two

pseudo random numbers a and b, each n number of bits, based upon a position

within the sequence of one of the messages, and generating a random

permutation σ that permutes the n bits(*Fig. 9A, item 936*).Therefore, it would

have been obvious to one having ordinary skill in the art at the time the invention

was made to modify the teaching of Moskowitz such to generate two random

numbers based on desistance One would have been motivated to do so in

order to securely watermark any executable (column 4, lines 4-49).

Claim 18: Moskowitz and Venkatesan et al disclose a system as in claim 17

above, and Venkatesan et al further discloses that an encoder sending the new

code to the decoder, the new code having embedded therein the seed (*column 8,*

lines 10-35). Therefore, it would have been obvious to one having ordinary skill in

the art at the time the invention was made to modify the teaching of Moskowitz

such to generate two random numbers. One would have been motivated to do

so in order to securely watermark any executable (column 4, lines 4-49).

Claim 31 Moskowitz and Venkatsesan et al disclose a system and method that

facilitates efficient code construction as in claim 28 above, and Moskowitz further

discloses that the decoder knowing the sequence of messages (*paragraph [0024]*).

13.   Claims 7, 8, 25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moskowitz (US 2008/0046742) in view of Venkatsesan et al (US 6,829,710) in further view of Cox (US 6,275,965).

Claim 7: Moskowitz and Venkatsesan et al disclose a system as in claim 6 above, but does not explicitly disclose that the checking component utilizing a checking function h" Zn {0,1}, where E is a finite alphabet that defines a family of codes and n is a length parameter for E. However, Cox et al discloses a system for efficient error detection and correction, which further discloses that the checking component utilizing a checking function h" Zn {0,1}, where E is a finite alphabet that defines a family of codes and n is a length parameter for E *(column 11, line 66 to column 12, line 40)*. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Moskowitz such to use checking function. One would have been motivated to do so in order to provide for enhancing the error detection and correction capability obtained when a plurality of data byte strings or vectors are interleaved and encoded in a two-level, block-formatted linear code using codeword (sub block) and block-level redundancy (column 2, line 64 to column 3, line 2).

Claim 8: <u>Moskowitz</u> and <u>Venkatsesan et al</u> disclose a system as in claim 6 above, but does not explicitly disclose that the checking component outputting a vector, the first code being corrupted when the vector is a non-zero vector . However, <u>Cox et al</u> discloses a system for efficient error detection and correction, which further discloses that the checking component outputting a vector, the first code being corrupted when the vector is a non-zero vector (*column 8, lines 23-38, column 9, lines 9-25; Fig. 5*). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of <u>Moskowitz</u> such to compute a nonzero vector output. One would have been motivated to do so in order to provide for enhancing the error detection and correction capability obtained when a plurality of data byte strings or vectors are interleaved and encoded in a two-level, block-formatted linear code using codeword (sub block) and block-level redundancy (column 2, line 64 to column 3, line 2).

Claims 25 and 29: <u>Moskowitz</u> and <u>Venkatsesan et al</u> disclose a system and a method as in claims 20 and 28 above, but does not explicitly disclose that comprising decoding the message, wherein the message is decoded at least in part by solving a minimum vertex cover problem. However, <u>Cox et al</u> discloses a system for efficient error detection and correction, which further discloses that comprising decoding the message, wherein the message is decoded at least in part by solving a minimum vertex cover problem(column 3, line 50 to column 4, line 15). Therefore, it would have been obvious to one having ordinary skill in the

art at the time the invention was made to modify the teaching of <u>Moskowitz</u> such

as to solve a vertex problem. One would have been motivated to do so in order

to increase data integrity and system security.

14.   Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

<u>Moskowitz</u> (US 2008/0046742) in view of <u>Venkatsesan et al</u> (US 6,829,710) in further

view of <u>Guruswami</u> (Foundations of Computer Science, 2001, Proceedings, 42nd IEEE

Symposium, Pages: 658- 667, ISBN: 0-7695-1116-3).

> *Claim 9:* <u>Moskowitz</u> and <u>Venkatsesan et al</u> disclose a system that facilitates
>
> efficient code construction as in claim 1 above, but does not explicitly disclose
>
> that the decoder utilizes a unique decoding function, <u>Guruswami</u> discloses a
>
> similar system, which further discloses a decoder utilizing a unique decoding
>
> function (*we further consider the list decoding version*) *(introduction and section*
>
> *5*). Therefore, it would have been obvious to one having ordinary skill in the art
>
> at the time the invention was made to modify the teaching of <u>Moskowitz</u> discloses
>
> a system that facilitates efficient code construction as in claim 1 above such as to
>
> include a unique decoding function. One would have been motivated to do so in
>
> order to increase data integrity and system security.
>
> *Claim 10*: <u>Moskowitz</u> and <u>Venkatsesan et al</u> disclose a system that facilitates
>
> efficient code construction as in claim 1 above , but does not explicitly disclosed
>
> that the decoder utilizes a list decoding function g, <u>Guruswami</u> discloses a similar
>
> system, which further discloses a decoder utilizing a list decoding function (*we*

further consider the list decoding version) (introduction and section 3).

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify the teaching of Moskowitz such as to

include a list decoding function. One would have been motivated to do so in

order to increase data and system security.

15.   Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Moskowitz (US 2008/0046742) in view of Venkatsesan et al (US 6,829,710) in further

view of Bohnke (US 6,557,139).

Claim 21: Moskowitz and Venkatsesan et al disclose a system as in claim 20

above, while neither of them explicitly discloses that the message is encoded

with a minimum relative distance. However, Bohnke discloses a similar system,

which further discloses an encoding component that encodes a message and

creates a code word, the encoding component encodes the message with a code

that has a minimum relative distance. Epsilon. And rate 1-.kappa..epsilon. for

some constant .kappa.>1. (In FIG. 3, a block diagram of an encoding structure

according to the present invention is shown, which comprises a data input

means, a checksum generator, a frame formatter and a turbo encoder. The data

input means receives serially arranged data bits, e. g. in data frames consisting

of N data bits, d.sub.0, d.sub.1, . . . d.sub.N-1. (Column 5, lines 50-55).

Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify the teaching of Moskowitz such as to

include such an encoder. One would have been motivated to do so in order to increase data and system security.

Claim 22: Moskowitz, Venkatsesan et al and Bohnke disclose a system as in claim 21 above, and Bohnke further discloses a component that utilizes the encoded message and divides the encoded message into a number of blocks B, the B blocks being of substantially similar size (Fig.1). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Moskowitz such as to use block encryption. One would have been motivated to do so in order to increase data and system security.

Claim 23: Moskowitz , Venkatsesan et al disclose and Bohnke disclose a system as in claim 22 above, and Bohnke further discloses the plurality of blocks encoded using $(n, k, n - k + 1)$ Reed-Solomon code, where n is a resulting size of the encoded blocks and k is a size of the blocks prior to encoding (column 7, lines 25-35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of Moskowitz such as to use the Reed-Solomon code. One would have been motivated to do so in order to increase data and system security.

16.   Claims 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moskowitz (US 2008/0046742) in view of Venkatsesan et al (US 6,829,710) in further

view of <u>Bohnke</u> (US 6,557,139) and <u>Guruswami</u> (Foundations of Computer Science,

2001, Proceedings, 42nd IEEE Symposium, Pages: 658- 667, ISBN: 0-7695-1116-3).

> ***Claim 24***: <u>Moskowitz</u> , <u>Venkatsesan et al</u> disclose and <u>Bohnke</u> disclose a system
>
> as in claim 23 above.   While neither reference explicitly discloses that the code
>
> hiding module comprising a bipartite expander graph with a number of edges
>
> being substantially similar to Bn, and symbols within the B blocks are randomly
>
> assigned an edge within the bipartite expander graph, <u>Guruswami</u> discloses a
>
> similar system, which further discloses an expander graph with a number of
>
> edges being substantially similar to Bn, and symbols within the B blocks are
>
> randomly assigned an edge within the bipartite expander graph(the construction
>
> employ expander graphs, which facilitate efficient decoding algorithms through
>
> various forms of voting procedures) (introduction and section 4). Therefore, it
>
> would have been obvious to one having ordinary skill in the art at the time the
>
> invention was made to modify the combined teaching of <u>Moskowitz </u>and <u>Bohnke</u>
>
> such as to include an expander graph. One would have been motivated to do so
>
> in order to increase data and system security.

17.   Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable

over <u>Moskowitz</u> (US 2008/0046742) in view of <u>Venkatsesan et al</u> (US 6,829,710) in

further view of <u>Tian et al</u> (US 6,714,683).

> ***Claim 26***: <u>Moskowitz</u> and <u>Venkatsesan et al</u> disclose a system as in claim 20
>
> above, but does not explicitly disclose that the system comprises a

synchronization component that synchronizes the code generator with the decoder. <u>Tian et al</u> discloses wavelet based feature modulation watermarks, which further discloses, which further discloses a synchronization component that synchronizes the code generator with the decoder(Column 1, line 65 o column 2, line 5). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of <u>Moskowitz</u> such as to include such to synchronize the decoder. One would have been motivated to do so in order to increase data and system security.

Claim 27: <u>Moskowitz</u> and <u>Venkatsesan et al</u> disclose a system as in claim 20 above, but does not explicitly disclose the code-hiding module embeds synchronization information into the second code. <u>Tian et al</u> discloses wavelet based feature modulation watermarks, which further discloses, which further discloses that the code-hiding module embeds synchronization information into the second code (column 4, lines 38-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teaching of <u>Moskowitz</u> such as to include such to synchronize the decoder. One would have been motivated to do so in order to increase data and system security.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Troyawsky et al (us 2003/0190054) method and system for distributing Digital content

with embedded message.

Abdulkader (US 2002/0085716) Encryption during modulation of signal

Cox et al (US 5,915,027) Digital watermarking

18.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Fatoumata Traore whose telephone number is (571)

270-1685. The examiner can normally be reached Monday through Thursday from 7:00

a.m. to 4:00 p.m. and every other Friday from 7:30 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Nassar G. Moazzami, can be reached on (571) 272 4195. The fax phone

number for Formal or Official faxes to Technology Center 2100 is (571) 273-8300. Draft

or Informal faxes, which will not be entered in the application, may be submitted directly

to the examiner at (571) 270-2685.

　　　Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the Group Receptionist whose telephone number is

(571) 272-2100.

 FT,

Friday, December 05, 2008

 /Carl Colin/

Primary Examiner, Art Unit 2436

12/5/2008